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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,805	12/27/2001	Hiroyuki Kurata	2342-131P	1377

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EXAMINER	
MCCLENDON, SANZA L	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Application No.	Applicant(s)	
	10/026,805	KURATA ET AL.	
	Examiner	Art Unit	
	Sanza L McClendon	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 December 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Maruno et al (5,068,261 and 5,204,378).

Maruno et al teaches fluorine containing epoxy (meth) acrylate resin adhesive cured in the presence of a photoinitiator. Maruno et al teaches said composition is an adhesive composition useful in bonding glass and/or quartz—see abstract. Per example 10, Maruno et al teaches mixing the fluoro-containing epoxy methacrylate resin with fluoro-containing acrylate and/or methacrylate monomers and curing in the presence of a photoinitiator. This appears to anticipate applicant's claim 1, wherein said acrylate and/or methacrylate fluoro-containing monomers are UV curable.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore et al (6,005,137).

Moore et al teaches halogenated acrylates and polymers derived from therefrom. Said halogenated acrylates have the general formula found in column 2, lines 55-60, wherein the halogenated acrylate can be a fluorinated acrylate polymer. Moore et al teaches said halogenated acrylates can be crosslinked in the presence of a crosslinking monomer, such as those taught in

columns 17 to columns 19, line 32. Said crosslinking monomers can be halogenated, such as fluorinated. Per example 14, Moore et al teaches crosslinking a fluorinated polymer with a fluorinated di-functional monomer, wherein said fluorinated crosslinkers are deemed to anticipate the UV curable fluorinated monomer in claim 1. The FPEGDA crosslinker in column 28, lines 55-58 appears to anticipate formula 2 in claim 2. Moore et al is deemed to anticipated the claimed invention because Moore et al teaches that said composition can used as an adhesive –see column 19, line 40 and 48.

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Moore et al (6,288,226).

Moore et al teaches halogenated acrylates and polymers derived from therefrom. Said halogenated acrylates have the general formula found in column 2, line 55, wherein the halogenated acrylate can be a fluorinated acrylate polymer. Moore et al teaches said halogenated acrylates can be crosslinked in the presence of a crosslinking monomer, such as those taught in columns 17 to columns 19, line 32. Said crosslinking monomers can be halogenated, such as fluorinated. Per example 14, Moore et al teaches crosslinking a fluorinated polymer with a fluorinated di-functional monomer, wherein said fluorinated crosslinkers are deemed to anticipate the UV curable fluorinated monomer in claim 1. The FPEGDA crosslinker in column 28, lines 27-48 appears to anticipate formula 2 in claim 2. Moore et al is deemed to anticipate the claimed invention because Moore et al teaches that said composition can used as an adhesive –see column 19, line 40 and line 48.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 04237055A.

7. JP 04237055A (herein referred to as JPA) teaches pellicle structure used as a dust-proof cover on a photomask. Said pellicle has an adhesive layer formed on the film. Said adhesive is a fluorinated adhesive comprising a fluorine containing polymer, a silicone polymer, and a particulate from of a fluorinated methacrylate, wherein said particulate methacrylate appears to read on the UV curable monomer in claim 1 because methacrylates are UV curable. Note the subject matter from JP 04237055A is taken from the abstract. A translation of JP 04237055A is in progress.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al in view of Moore et al (6,005,137).

Hamada et al teaches frame-supported pellicle for dustproof protection of photo-mask. Said frame-supported pellicle comprises a rigid frame and a transparent plastic film adhesively bonded to one end surface of the frame in a slack-free fashion, for dustproof protection of a photo-mask. Said adhesive that is used is a fluorocarbon group-containing polymeric resin, such as a copolymeric tetra-fluoro-ethylene and a fluoro-carbon monomer having a cyclic perfluoro-ether group, as seen in the examples. The Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicant's polymer differs and, if so, to what extent, from the discussed reference. Therefore, with the showing of the reference, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants and it is deemed that this copolymer has the structural units of claim 3 until such time. Hamada et al does not expressly teach adding a monomer to said adhesive composition for bonding the pellicle film to the frame.

Moore et al teaches halogenated acrylates and polymers derived from therefrom. Said halogenated acrylates have the general formula found in column 2, lines 55-60, wherein the halogenated acrylate can be a fluorinated acrylate polymer. Moore et al teaches said halogenated acrylates can be crosslinked in the presence of a crosslinking monomer, such as those taught in columns 17 to columns 19, line 32. Said crosslinking monomers can be halogenated, such as fluorinated. Said crosslinking agents are useful in adding flexibility, stability and strength while reducing swelling when exposed to small molecules in the cured adhesive composition.

Hamada et al and Moore et al are analogous art because they are from the same field of endeavor that is the fluorinated adhesive art.

Therefore, it would have been obvious for one of ordinary skill in the art to use a radiation curable fluorinated crosslinking monomer, such as those taught by Moore et al, in the adhesive composition as taught by Hamada et al. The motivation would have been to obtain an adhesive composition having adequate flexibility, stability, and strength, in addition to having reduced swelling when exposed to small molecules with the expectation of success in the absence of convincing arguments and/or evidence. In addition it would have been obvious for a skilled artisan to produce a pellicle frame comprising said adhesive composition. The motivation would have been to adequately produce an adhesive bond the pellicle film to the frame, wherein the adhesive bond ensures the stability of the supported state of the film to the frame in the expectation of adequate success.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what type of substance is produced from curing of the UV curable fluorinated monomer. Is the resulting substance another polymer (i.e. a two phase system fluorinated polymer and the resulting polymer from curing said monomer); is it an IPN, a semi-IPN, a crosslinked network of the polymer and curable monomer? Clarification is requested.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

Sanza L McClendon
Examiner
Art Unit 1711

SMc
May 16, 2003

James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700